

Abstract of the Disclosure

Disclosed is an input apparatus used in a SSTL interface, which comprises a differential buffer for comparing an external input signal with a reference potential inputted from an external, and a CMOS buffer for buffering the external input signal. In the input apparatus, the CMOS buffer operates when a command signal or an address signal is not inputted from an external, and when a predetermined operation such as a refresh operation is performed, thereby reducing the power consumption in a standby mode. Further, in order to prevent the input apparatus from abnormally operating when the reference potential is not maintained in the normal operation range, a reference potential level detecting circuit is further included in the input apparatus, so that the CMOS buffer operates when the reference potential deviates from a predetermined normal operation range. Furthermore, in order to enable an input buffer to operate as the CMOS when an input signal fully swings, a circuit for detecting a potential of an input signal inputted from an external is further included in the input apparatus.